

HIGH-ACCURACY  
SMALL-BATCH OPTIMISED

The FT102TT is a compact, rapid benchtop carbonator and filler designed for start-ups and small laboratories. Distilling the high-accuracy technology of the industry-leading FT102XA into a tabletop footprint, this system seamlessly integrates with external kegs and chillers to deliver precise, scalable beverage R&D results in space-constrained environments.

External 9.5-litre product keg



Simple and intuitive controls



Variable bottle sizes and filling rates

## Features/benefits

### Features

- ▶ **Compact footprint:** Dimensions of 700 x 510 x 700 mm easily fit on a standard laboratory bench, tabletop, or plinth.
- ▶ **High-accuracy dosing:** Carbonation levels  $\geq 10\text{g/l}$  with strict precision ( $\pm 0.1\text{g/l}$ ).
- ▶ **Versatile dispensing:** Fills PET and glass bottles ranging from 150ml to 2000ml.
- ▶ **Flexible processing:** Supports both pre-mixing and post-mixing capabilities.
- ▶ **Intuitive control:** Full-colour touchscreen HMI with diagrammatic display screens and basic recipe functions.
- ▶ **Data integration:** Control system enables detailed data capture.
- ▶ **Robust construction:** 304 SS/PU machine cabinet with 316L SS, silicone, PTFE, and EPDM product contact surfaces.
- ▶ **Fully compliant:** Meets CE, UKCA, and stringent BS EN ISO safety and machinery standards.

### Benefits

- ▶ **Optimised for small spaces:** Eliminates the need for large-scale equipment, making it the perfect retrofit for start-ups or laboratories with tight floor plans.
- ▶ **Rapid results:** Focuses on the most desirable features of the larger FT102XA to accelerate testing and results.
- ▶ **Uncompromising consistency:** PLC control guarantees that every R&D batch is highly repeatable and reliable.
- ▶ **Cost-effective flexibility:** Adapts to various packaging sizes and beverage types (water, syrup, premix) without requiring extensive line changeovers.

## The Process

The FT102TT streamlines beverage development by offering rapid, highly accurate carbonation and filling capabilities directly on your laboratory bench.

The process begins with either a pre-mixed product or a post-mix water and syrup configuration. Utilising an external 9.5-litre product keg and an external chiller, the system precision-injects carbon dioxide to achieve precise carbonation levels up to and exceeding 10 g/l.

Thanks to its advanced Programmable Logic Controller (PLC) and intuitive full-colour touchscreen HMI, users can easily input and execute basic recipe functions. The system maintains strict control over the carbonation parameters, ensuring exceptional accuracy to within  $\pm 0.1\text{g/l}$  for consistent, repeatable test results.

Once carbonated, the liquid is rapidly dispensed into either PET or glass bottles. The versatile dispensing architecture accommodates a wide range of bottle sizes, from 150ml up to 2000ml samples.

Throughout the run, integrated diagrammatic display screens provide real-time process visibility, while the control system enables seamless data capture for analysis. By prioritising the core functions of its larger predecessor, the FT102TT delivers meaningful, production-ready R&D data without demanding extensive floor space.

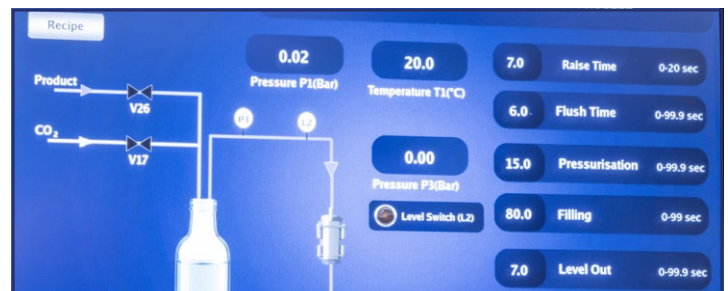
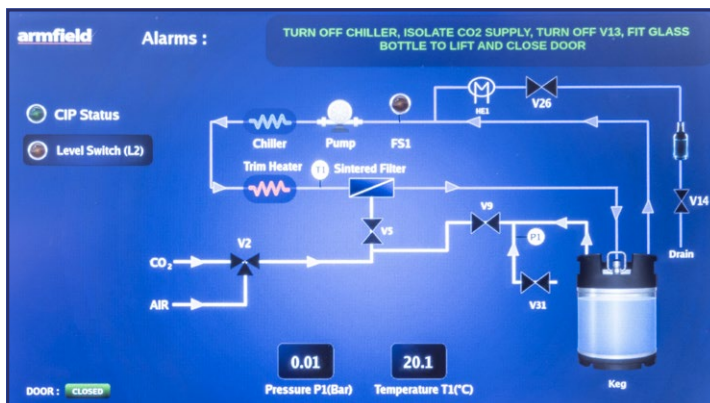
### Requirements



### Scale



- ▶ **Electricity - FT102TT:** 110-240V 50-60Hz (one socket required)
- ▶ **CO<sub>2</sub> supply:** with manual regulator, 4 bar
- ▶ **Compressed air:** 6 bar, minimal consumption
- ▶ **Water supply:** minimum 2 bar Flow rate minimum 5 l/min



### Overall dimensions

Length	0.698m
Width	0.508m
Height	0.696m (not including feet).

### Packed and created shipping specifications

Volume	1.8m <sup>3</sup>
Nett Weight	60kg
Gross Weight	130kg

### Technical specifications

Gas content	Controllable to in excess of 10 g/l
Keg capacity	9.5 litre
Maximum Keg pressure	9 bar
Gases	Carbon Dioxide (High purity, moisture free)
Contact surfaces	316L SS, silicone, PTFE, EPDM
Operation methods	Batch or Semi-continuous

### Ordering codes

- ▶ FT102TT

**Armfield standard warranty applies with this product**

## Knowledge base

- > 30 years expertise in industrial R&D technology
- > 60 years providing engaging engineering teaching equipment

Benefit from our experience, just call or email to discuss your laboratory needs, latest project or application.

An ISO 9001 Company



[armfield.co.uk](http://armfield.co.uk)

## Aftercare

Installation  
Commissioning  
Training  
Service and maintenance  
Support: [armfieldassist.com](http://armfieldassist.com)